

In this Issue:

- ◆ A Year in Review, North Dakota Highlights
- ◆ Summary of Reportable Conditions

A Year in Review, North Dakota Highlights

Immunization Program

Smallpox Vaccination Plan – Phase I

Phase I of the smallpox vaccination plan involves vaccination of state and local health authorities who would then be ready to provide care and vaccine in response to a smallpox outbreak. North Dakota recently received 1,600 doses of smallpox vaccine from the CDC. Information regarding the North Dakota smallpox program is available at www.health.state.nd.us/smallpox/.

State bioterrorism (BT) coordinators are distributing smallpox vaccine to the eight BT planning regions. Smallpox vaccination of health care providers and smallpox response teams began Feb. 24, 2003. National information regarding the number of people vaccinated and adverse events is available at www.cdc.gov/od/oc/media/smpxrppt.htm.

North Dakota public health officials attended train-the-trainer courses at the CDC on topics such as vaccine administration, adverse effects, post-vaccination care and surveillance.

In addition to the North Dakota smallpox website, information regarding smallpox and smallpox vaccination is available at www.bt.cdc.gov/agent/smallpox.

Other Disease Control Activities

Foodborne Outbreaks

Norovirus

Between Dec. 1 and Dec. 12, 2002, three outbreaks of gastrointestinal illness related to a motel were reported to the North Dakota Department of Health (NDDoH). A total of 225 (48.4%) people were ill out of 465 people interviewed. The predominant symptoms included:

- Diarrhea (93.7%)
- Nausea (83.2%)
- Abdominal discomfort (76.2%)
- Vomiting (64.3%)
- Headache (62.1%)
- Fever (37.4%)

Norovirus, of the family *Caliciviridae*, was confirmed in 10 of 11 stool samples submitted.

A gastrointestinal outbreak also was reported in early December from a public school in northeastern North Dakota. Five of the six stool samples were positive for norovirus.

The department has received other reports of gastrointestinal illnesses in people in long-term care facilities and hospitals, with symptoms consistent with norovirus infection. Consultation provided to the facilities stressed the importance of preventive measures such as proper hand washing, minimizing bare-hand contact with ready-to-eat foods and excluding ill employees from work for 48 to 72 hours following onset of symptoms.

Reports of illness clinically and epidemiologically consistent with norovirus infection increased nationwide during June to December 2002 (2,4). Cruise ships received most of the media attention for the recent outbreaks. More reported gastrointestinal outbreaks involved cruise ships in 2002 than in the past four years combined (2). The Minnesota Department of Health (MDH) also reported numerous norovirus outbreaks during the last six months of 2002. The MDH implicated norovirus as being responsible for 64 percent of the state's foodborne outbreaks in 2002 (5). Websites providing additional norovirus information include www.cdc.gov/mmwr/preview/mmwrhtml/mm5203a1.htm and www.cdc.gov/ncidod/EID/vol9no1/020175.htm#.

Clostridium perfringens

In December 2002, the NDDoH investigated an outbreak in western North Dakota involving employees who attended an open house hosted by their employer. Approximately 300 employees were served 90 turkeys in a two-day period. Environmental investigations revealed numerous inadequate food-handling procedures involving improper storage temperatures, possible cross contamination, hand washing, etc. A stool sample from one of the employees was positive for *Clostridium perfringens*.

Arboviral encephalitis surveillance

In 2002, the NDDoH Division of Microbiology tested more than 350 patients for arboviral disease. The laboratory reported 17 presumptive positives for West Nile virus (WNV) infection. The samples were sent to the CDC for confirmation. Ten samples have been confirmed by plaque-reduction neutralization tests, six are pending and one was negative. All specimens were negative for eastern equine encephalitis, western equine encephalitis, LaCrosse encephalitis, California serogroup encephalitis and St. Louis encephalitis.

More than 600 horses were reported to the Division of Disease Control with symptoms of encephalitis. Serum samples from these horses sent to the North Dakota Veterinary Diagnostic Laboratory for testing identified 569 WNV equine cases. Cases were reported in every county except Divide.

More than 300 dead birds collected from 40 counties were tested for WNV by the United States Geological Services (USGS) Wildlife Laboratory in Madison, Wisc. The USGS identified 65 birds belonging to 12 different species that were positive for WNV. Dead birds submitted from 22 of the 40 counties for WNV testing were found to be positive.

In 2002, mosquito trapping was conducted at 36 sites around North Dakota. A total of 60 New Jersey Light traps were used to collect mosquitoes during the 16-week period from June 3, 2002, to Sept. 19, 2002. The female *Culex tarsalis* population peaked around the beginning of August and remained at similar levels until the end of August. To date, 78 *Culex tarsalis* mosquito pools have been tested for WNV at the Division of Microbiology. One mosquito pool from Grand Forks County was found to be WNV positive. This pool was collected in July near the site of the first horse identified with WNV infection.

Rabies

In 2002, 444 animals were tested for rabies in North Dakota. Of these, 59 (13.3%) were rabid, a slight increase from the 41 (10.2%) that were found rabid in 2001. Six different animal species were found to be rabid (Table 1). Skunks, the primary rabies reservoir in North Dakota, accounted for 66 percent of all animals testing positive for rabies. Almost 70 percent of the skunks tested in 2002 were rabid. Twenty-two skunks were identified with rabies in 2001 compared to 39 in 2002. One raccoon also was found to be rabid. However, testing was not able to be conducted to determine if the rabies was due to skunk or raccoon variant.

Among domestic animals, three cats were found to be rabid in 2001 and five in 2002. Two dogs were positive for rabies in both 2001 and 2002. Among livestock, six bovines were found to be rabid in 2001 and 11 in 2002. Although three equines were found to be rabid in 2001, none were identified in 2002. One sheep was identified with rabies in 2002.

Table 1. Animal Rabies by Species		
North Dakota, 2001-2002		
Animal Species	2001	2002
Cat	3	5
Cow	6	11
Dog	2	2
Horse	3	0
Raccoon	0	1
Sheep	0	1
Skunk	27	39

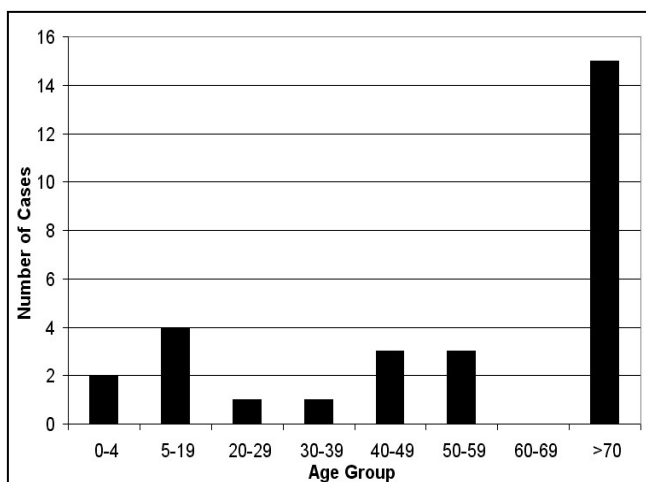
Streptococcus pneumoniae

Twenty-nine invasive *Streptococcus pneumoniae* cases were reported to the North Dakota Department of Health in 2002. This represents almost a 50 percent decrease from the number of cases reported in 2001 (n = 60).

Of the 29 reported cases, 51.7 percent (15 cases) were in adults older than 70 (Figure 1). Only one case of invasive *S. pneumoniae* was reported in a child younger than 5, a substantial decrease from the 12 cases reported in this age group in 2001.

Two of the cases were resistant to penicillin. One case of meningitis was reported in a 78-year-old patient where *S. pneumoniae* was isolated from cerebral spinal fluid. Two fatalities involving invasive *S. pneumoniae* infections were reported to the NDDoH. One fatality involved a 43-year-old, while the other involved an 80-year-old.

Figure 1. Reported *Streptococcus pneumoniae* Cases by Age Group, North Dakota, 2002



PneumTM, the 7-valent pneumococcal conjugate vaccine, was added to the recommended childhood immunization schedule for all children ages 2 months through 23 months by the Advisory Committee on Immunization Practices in 2000. Success of the childhood immunization program is one of the contributing factors in the decrease of *S. pneumoniae* infections involving children younger than 5 in the nation (3). The 23-valent polysaccharide pneumococcal vaccine, available in the U.S. since 1983, continues to be recommended for all adults 65 and older.

Enteric Bacterial Infections

In 2001, 20 *E. coli* O157:H7 cases were reported, compared to 27 in 2002. No common source outbreaks were reported, although secondary spread to household contacts was documented in some of the cases. Salmonella cases decreased by 14 percent, from 71 cases reported in 2001 to 61 in 2002. Of the confirmed cases in 2002, 41 cases were sub-typed. Twenty-two percent (nine cases) of the isolates were *S. typhimurium*, 12 percent (five cases) were *S. heidelberg* and 10 percent (four cases) were *S. newport*.

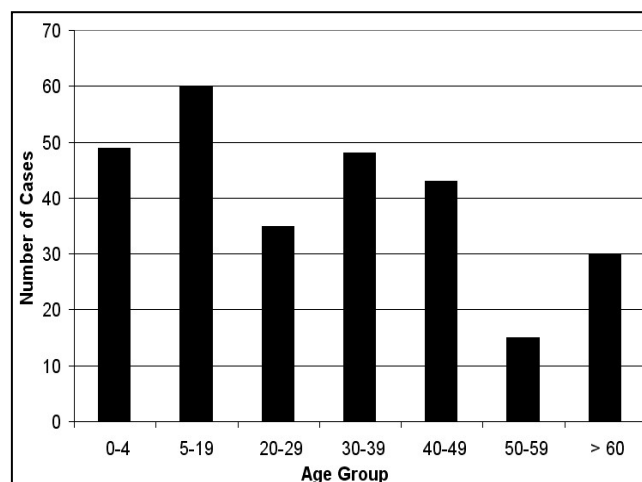
The number of reported campylobacter cases remained relatively unchanged, with 84 cases reported in 2002 compared to 85 in 2001. In 2002, 20 shigella cases were reported, compared to 27 in 2001.

The majority of individuals affected by the types of enteric bacteria discussed in this report are less than 20 years old (Figure 1).



Copyright© International Association for Food Protection

Figure 1. Selected Enteric Diseases by Age Group, North Dakota, 2002



Shiga-toxin Study

In June 2001, the Division of Microbiology began providing free statewide testing for shiga-toxin producing *E. coli* (STEC) on all stool specimens tested for enteric pathogens. The ProSpecT[®] Enzyme Immunoassay (EIA) was chosen for ease of testing and rapid results. All EIA-positive screen specimens were further tested for identification and serotyping of the organism. Twenty-five clinic/hospital laboratories were contacted. Twelve laboratories participated in 2001 and 11 labs in 2002. As of Dec. 31, 2002, 2,805 specimens have been tested, yielding 42 STEC positive isolates (1.5%). Serotypes other than O157 were confirmed at the CDC. The number and serotypes recovered from positive screens are provided in Table 1.

Table 1. STEC Positive Test Results North Dakota, 2001-2002

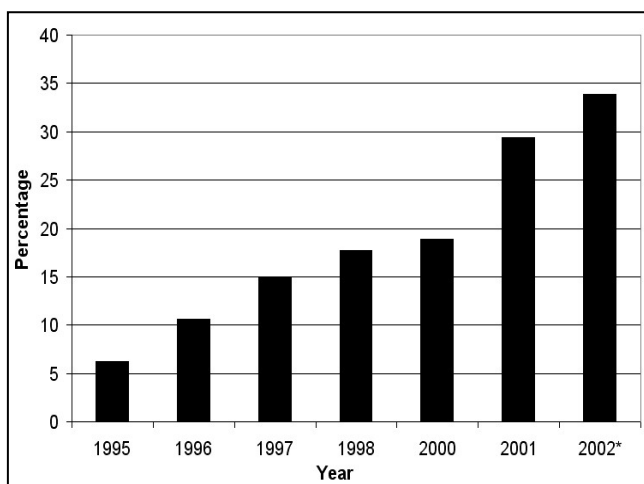
2001 June 1 to December 31		2002 January 1 to December 31	
Serotype	Number	Serotype	Number
O157:H7	18	O157:H7	11
O103:H2	1	O103:H2	0
O26:H11	5	O26:H11	1
O26:NM	0	O26:NM	2
O145:NM	1	O145:NM	0
O55:NM	0	O55:NM	1
O88:H25	0	O88:H25	1
False Positives	1	False Positives	1
Pending at CDC	0	Pending at CDC	1
TOTAL	26	TOTAL	18

Methicillin-Resistant *Staphylococcus aureus* (MRSA)

MRSA has become an increasing health concern in many areas of the United States. MRSA infections contracted in hospitals and long-term care facilities are of particular concern. Recently, however, MRSA outbreaks have been noted in other community-associated settings, including correctional facilities and athletic teams.

Invasive MRSA infections isolated from sterile sites became a reportable condition Feb. 1, 2000, and on Aug. 1, 2002, MRSA isolates from all sites became a mandated reportable condition. Prior to MRSA becoming a mandated reportable condition, voluntary surveillance was conducted with North Dakota hospitals and laboratories. Participating laboratories reported the total number of *Staphylococcus aureus* susceptible and resistant isolates to the NDDoH. The data from this surveillance may be subject to some bias because of the possibility of increased surveillance due to screening from some facilities and multiple isolates reported from the same person. The results of this surveillance, however, indicate that MRSA infections have been steadily increasing in North Dakota (Figure 1).

Figure 1. Percentage of MRSA Isolated by Year, North Dakota, 1995-2002



*2002 data is from January 1, 2002 - June 30, 2002 due to change in reporting requirements.

From January through July 2002, a total of 104 MRSA isolates from sterile sites were reported. Of these, 94.2 percent were reported from individuals age 65 and older. Slightly more males (55.8%) were reported with MRSA than females (44.2%). After Aug. 1, 2002, when all MRSA infections became reportable, the largest percentage of MRSA continues to be reported among people 65 and older, although the percentage decreased to 43.3 percent. Distribution between genders was similar, with 49.4 percent of the cases male, 48.7 percent female and 1.8 percent unknown.

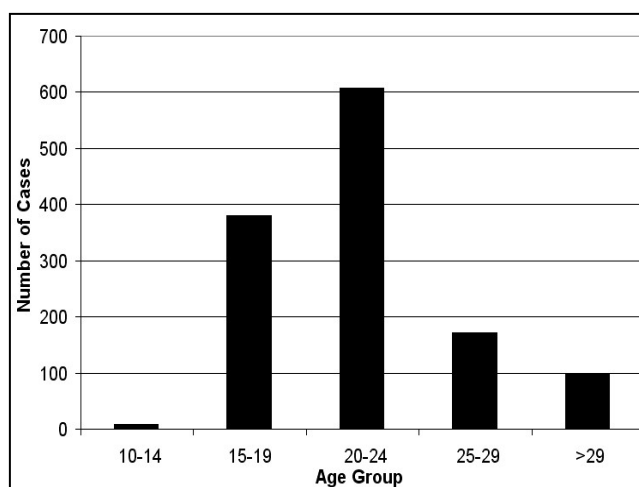
Sexually Transmitted Diseases (STD)

Chlamydia

Preliminary sexually transmitted disease data indicates an increase of chlamydia and gonorrhea cases in 2002 when compared to 2001. The 1,268 cases of chlamydia reported in 2002 is the highest number of cases reported in the past 10 years (Figure 1). The 1,268 chlamydia cases reported in 2002 is a 19.4 percent increase from 1,062 reported in 2001.

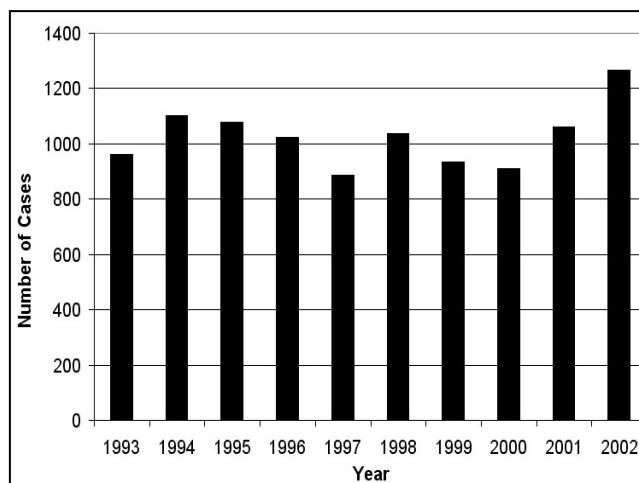
Females accounted for 66 percent of the reported cases in 2002.

Figure 1. Reported Chlamydia Cases by Year North Dakota, 1998-2002



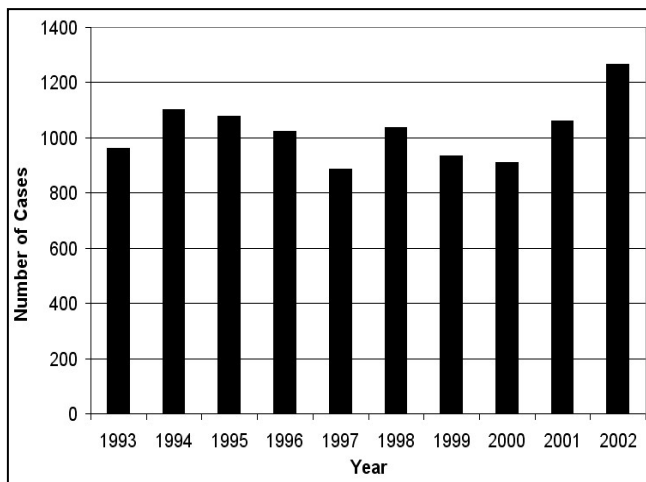
Almost one-half (48%) of the cases were reported in the 20- to 24-year age group, with 30 percent of the cases being reported in the 15- to 19-year age group (Figure 3). The largest increase in cases occurred in people age 20 to 24 (34.6% increase).

Figure 3. Reported Chlamydia Cases by Age Group, North Dakota, 2002



Racial minorities continue to be disproportionately affected by chlamydia. Although American Indians, blacks and people of Hispanic decent compose less than 7 percent of North Dakota's population, almost 33 percent of the chlamydia cases were reported from these populations (Figure 4).

Figure 4. Reported Chlamydia Rates by Race/Ethnicity, North Dakota, 2002



The trend of increasing reported chlamydia cases since 2000 is consistent with trends in other Region VIII states (North Dakota, South Dakota, Montana, Colorado, Utah and Wyoming). Several factors may be contributing to the increases in reported chlamydia cases in North Dakota. Increased screening by private health care providers may be resulting in increased diagnosis. The use of newer, more sensitive testing technology also may be responsible for better diagnosis of disease. Additionally, actual increases in disease may be occurring. Although a combination of these factors may be contributing to the increases in chlamydia, it indicates that North Dakota's young people continue to engage in sexual behaviors that put them at risk.

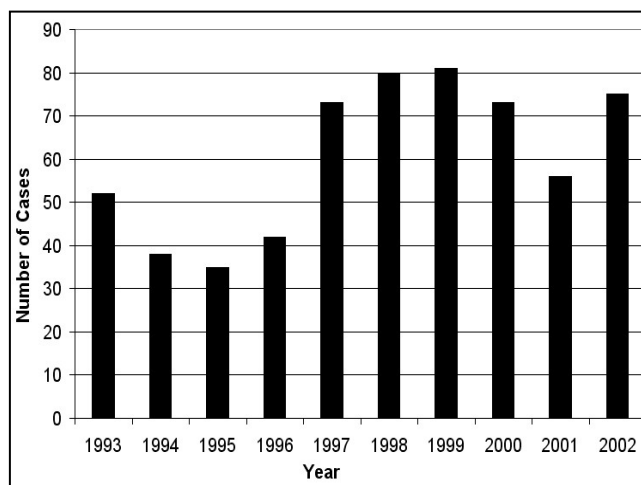
Gonorrhea

Seventy-five gonorrhea cases were reported in 2002, which is above the five-year median of 73 cases. Reported gonorrhea cases increased 33.9 percent, from 56 cases in 2001 to 75 cases in 2002. The number of annual gonorrhea cases reported from 1993 to 2002 is provided in Figure 5. Slightly more than one-half (55%) of the cases were reported among females.

Did You Know??

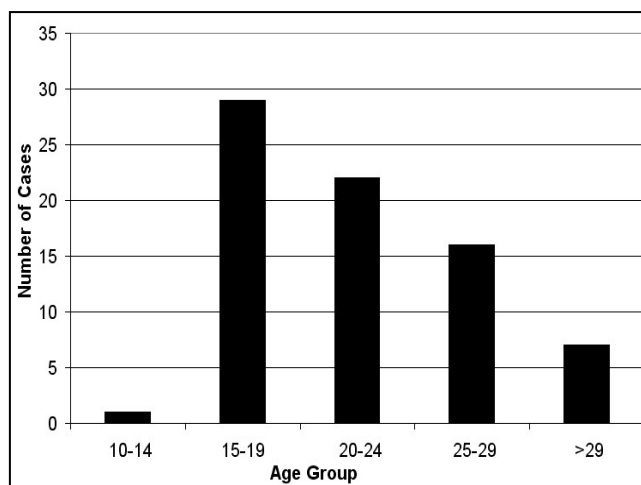
Primary and secondary syphilis infections are increasing in the United States among men who have sex with men.

Figure 5. Reported Gonorrhea Cases by Year North Dakota, 1998-2002



Unlike chlamydia, reported cases of gonorrhea were highest among people age 15 to 19 with 29 reported cases, followed by 22 cases among people age 20 to 24 (Figure 7). The largest increase occurred in people age 15 to 19, with an 82 percent increase from the 16 cases reported in 2001.

Figure 7. Reported Gonorrhea Cases by Age Group, North Dakota, 2002

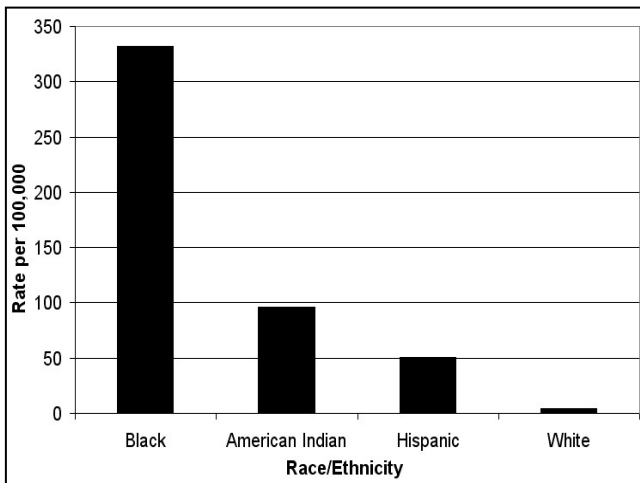


As seen with chlamydia, racial minorities also are affected disproportionately by gonorrhea (Figure 8). Forty percent of gonorrhea cases were reported among people of American Indian, black and Hispanic decent.

Did You Know??

In the United States, there has been inadvertent use of Bicillin® C-R for the treatment of syphilis. The correct formulation of penicillin for the treatment of syphilis is Bicillin® L-A.

Figure 8. Reported Gonorrhea Rates by Race/Ethnicity, North Dakota, 2002



Beginning in March 2003, the Division of Microbiology will implement new chlamydia and gonorrhea testing technology. This new system uses nucleic acid amplification to detect chlamydia or gonorrhea from a single urogenital or urine specimen.

HIV/AIDS/TB

HIV/AIDS

In 2002, 22 HIV infections were reported in North Dakota. Six of the cases were female and 16 were male; 17 were white, three were American Indian, one was black and one was Hispanic. The mean age at HIV diagnosis was 31.3 years. Fourteen identified male-to-male sexual contact (MMS) as their primary risk factor, four reported heterosexual contact with a person at risk, one reported injecting drug use (IDU) and three had no identified risk (NIR).

HIV/AIDS in North Dakota, 1998 – 2002

The most recent five-year period provides a more current picture of HIV/AIDS in North Dakota. Caution is recommended when interpreting these data due to low numbers.

Gender and Age

Since the beginning of the HIV/AIDS epidemic, males have accounted for the majority of the reported HIV/AIDS cases each year. However, the number and proportion of cases among females have increased over time. Females composed 26 percent (22/84) and males 74 percent (62/84) of the recently reported cases from 1998 through 2002. During the previous five-year period from 1993 through 1997, females composed 14 percent (13/95) and males 86 percent (82/95) of the reported cases. Fifty-eight percent (49/84) of the cases

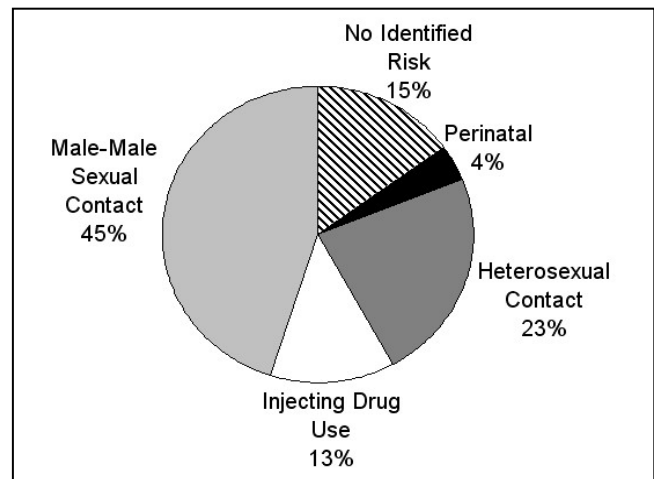
reported from 1998-2002 were between the ages of 20 and 39 at HIV diagnosis.

Risk Factors

The assessment of reported risk factors indicates 45 percent reported male-to-male sexual contact, 23 percent reported heterosexual contact with a person at risk (e.g., IDU, person with HIV/AIDS, bisexual) and 13 percent reported injecting drug use from 1998-2002.

Since HIV/AIDS surveillance began in 1984, those reporting unspecified risk (No Identified Risk or NIR) has been steadily increasing. Of the cases reported from 1998 through 2002, 15 percent (13/84) reported no identified risk (Figure 1). Of these, 84 percent (11/13) were male. During the previous five-year period from 1993 through 1997, 1 percent (11/95) reported no identified risk. Of these, 73 percent (8/11) were male. One hypothesis for the percentage of NIR may be due to the social stigma associated with MMS.

Figure 1. Reported HIV/AIDS Cases by Risk Factor, North Dakota, 1998-2002



Race/Ethnicity

Whites continue to account for the largest number of reported infections in recent years (Figure 2). Men and women of color also are disproportionately affected by HIV/AIDS. American Indians compose about 5 percent of North Dakota's population but account for 14 percent (12/84) of the recently reported HIV/AIDS cases. Blacks compose less than 1 percent of North Dakota's population but account for 14 percent (12/84) of the recently reported infections. Seven of the 12 cases reported among blacks were recent immigrants to the United States.

ND AIDS Hotline

1.800.70.NDHIV

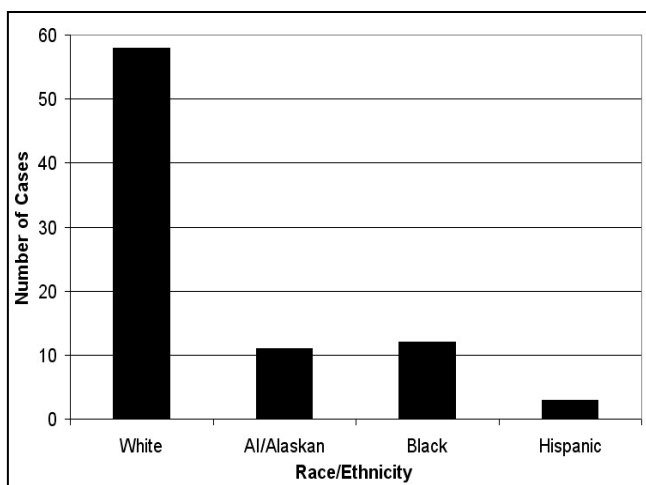
National AIDS Hotline

1.800.342.2437

For more information on HIV, visit:

www.ndhiv.com

Figure 2. Reported HIV/AIDS Cases by Race/Ethnicity, North Dakota, 1998-2002



HIV/AIDS Cases, North Dakota (1984-2002)

HIV infection and AIDS have been reportable conditions in North Dakota since 1984. These include cases that were newly diagnosed in the state, as well as cases that were diagnosed elsewhere and moved to North Dakota.

As of Dec. 31, 2002, 302 HIV/AIDS cases have been reported in North Dakota. Of the reported cases, 57 percent (172/302) are known to have been diagnosed as AIDS and 39 percent (117/302) are known to have died.

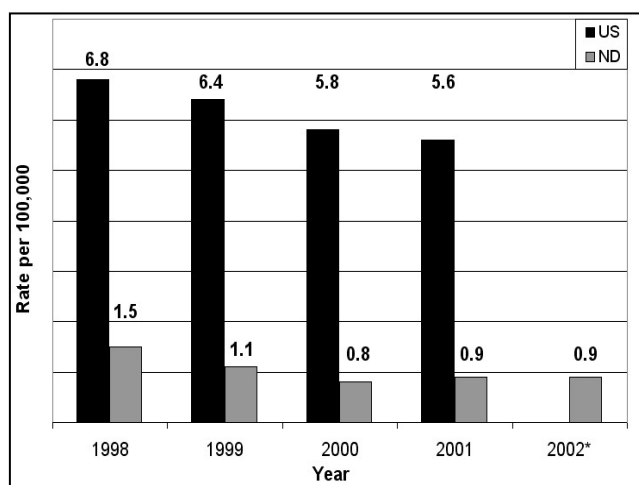
Of the 302 reported HIV/AIDS cases:

- 85 percent have been male, 15 percent female.
- 52 percent identified male-to-male sexual contact as a risk factor.
- 71 percent have been between the ages of 20 and 39 at diagnosis.
- 79 percent (238) were white, 11 percent (33) were American Indian, 7 percent (22) were black, 3 percent (8) were Hispanic, and 0.3 percent (1) was Asian/Pacific Islander.

Tuberculosis

In 2002, six cases of tuberculosis (TB) were reported in North Dakota. With an incidence rate of 0.9 per 100,000, North Dakota continues to be considerably below the national rate (Figure 1).

Figure 1. United States and North Dakota Tuberculosis Disease Rates, 1998-2002



* U.S. rates not currently available.

Four of the tuberculosis cases were pulmonary and two involved extra-pulmonary sites. Both of the extra-pulmonary cases involved a cervical lymph node.

The ages of the tuberculosis cases ranged from 21 to 82, with a median age of 25. Two cases were white, two were Asian and two were American Indian.

Risk factors associated with tuberculosis in 2002 included being a contact to active tuberculosis disease, belonging to a high-risk racial/ethnic group, being foreign-born and having prior tuberculosis infection.

No tuberculosis-related deaths were reported in 2002.

Tuberculosis in North Dakota, 1998-2002

From 1998 through 2002, 34 cases of tuberculosis were reported in North Dakota. The number of annual tuberculosis cases ranged from five to 10, resulting in an incidence rate of between 0.8 and 1.5 per 100,000.

Of the 34 cases, 21 were pulmonary (62%), 12 were extra-pulmonary (35%) and one was pulmonary/extra-pulmonary (3%). Sixty-two percent of the tuberculosis cases were younger than 60. The mean and median ages of tuberculosis cases during the past five years were 49 and 56 respectively. As shown in Figure 2, the median age in 2002 was lower than in previous years. This is due to the diagnosis of disease in four adults between the ages 21 and 25.

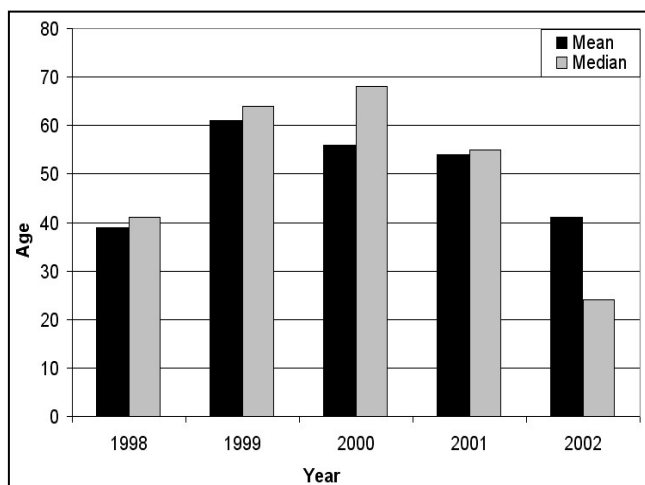


FYI!!

For more information about tuberculosis, visit
<http://www.health.state.nd.us/disease/tb>

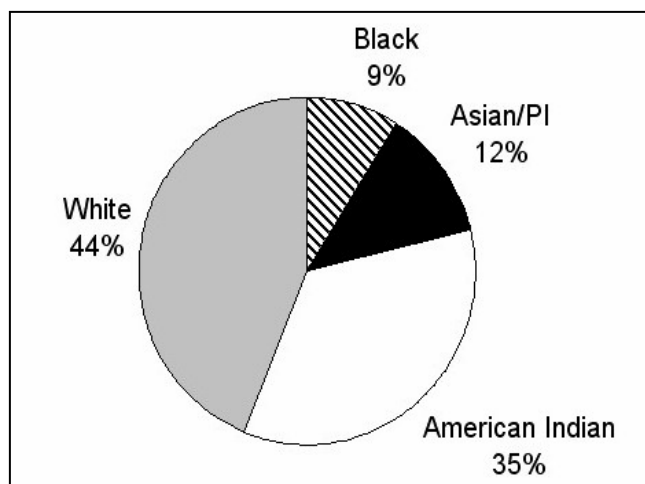
or call 1.800.472.2180

**Figure 2. Tuberculosis by Age
North Dakota, 1998-2002**



The race/ethnicity of tuberculosis cases during the past five years shows a disproportionately high number of the cases reported among minority populations, with more than one-third occurring in American Indians.

**Figure 3. Percentage of Tuberculosis Cases by
Race/Ethnicity, North Dakota, 1998-2002**



An increase in the state's racial/ethnic populations during the past few years has contributed to the increased number of tuberculosis cases reported in these racial/ethnic groups. While the number of foreign-born people in the state represents less than 2 percent of the state's total population, it increased 29 percent between 1990 and 2000.

Drug-Resistant Tuberculosis

Drug resistant tuberculosis (DR-TB) and multidrug-resistant tuberculosis (MDR-TB) present difficult problems for tuberculosis control. This is due to the complicated treatment regimen of the index case and the treatment of latent tuberculosis infection in contacts to the index case. The contact's treatment regimen must be

individualized based on the index case's medication history and drug susceptibility studies.

With the increase in foreign-born populations entering the United States and North Dakota, the potential exists for an increase of DR-TB. During the past five years, however, there have been no cases of multidrug-resistant tuberculosis identified in North Dakota. Furthermore, only two cases of single-drug resistance have been identified. One tuberculosis isolate in 1998 was resistant to ethambutol, while an isolate in 2002 was resistant to streptomycin.

Latent Tuberculosis Infection

Latent tuberculosis infection (LTBI) occurs when individuals are infected with *M. tuberculosis* bacteria through direct exposure to active tuberculosis disease. People with infection do not have active disease and are not infectious. Clinical findings of LTBI normally include a positive tuberculin skin test, absence of symptoms and a normal chest x-ray.

The number of tuberculosis infections reported in North Dakota showed a steady increase between 1998 and 2000, but decreased both in 2001 and 2002 (Table 3). The increase was related primarily to the increase in the foreign-born population entering the state. However, since 2002 there has been a decrease in foreign-born people moving to North Dakota, which is the primary reason for the decrease in the number of reported LTBI cases. Table 3 includes only reported cases of LTBI who received medication. Many others with LTBI are not deemed candidates for treatment.

**Table 3. Reported Cases of LTBI¹
North Dakota, 1998-2002**

Year	1998	1999	2000	2001	2002
Cases	426	450	567	370	248 ²

¹ Includes only LTBI cases receiving treatment.

² Provisional data

Revised Guidelines For the Treatment of Tuberculosis

Revised guidelines for the treatment of tuberculosis recently were released by the American Thoracic Society (ATS)/ Centers for Disease Control and Prevention (CDC)/ and Infectious Diseases Society of America (IDSA) (1).

The new guidelines differ from previous versions in several important ways (Table 4).

A significant change in the guidelines transfers the responsibility for successful treatment of tuberculosis, which includes not only prescribing an appropriate regimen but also ensuring adherence to the regimen until

treatment is complete, from the patient to the managing provider or public health program.

The guidelines are available at www.thoracic.org/adobe/statements/treattb.pdf.

Table 4. Selected Significant Changes in Revised Guidelines for the Treatment of Tuberculosis

- A strong recommendation that the initial treatment strategy utilize patient-centered case management with an adherence plan that emphasizes direct observation of therapy.
- An emphasis on obtaining sputum cultures upon completion of the initial phase of treatment in order to identify patients at increased risk of relapse, with prolongation of the continuation phase of therapy recommended for these patients.
- A definition of treatment completion based on the number of doses ingested over a given period of time.
- A new once-a-week rifapentine-containing continuation phase regimen as an option for selected HIV-negative patients.
- A discussion of the practical aspects of therapy, including use of fixed-dose combination preparations, monitoring, drug interactions and management of adverse effects.
- A detailed discussion of special treatment situations, including HIV infection, pediatric TB, renal disease, and extrapulmonary TB.
- A discussion of updated strategies for management of drug-resistant TB.

Reportable Condition Changes

Several changes have occurred to the reportable condition list. In August 2002, the State Health Council added all testing for HIV including antigen or nucleic acid detection. All MRSA isolated were added, as well as unexplained critical illness or death in an otherwise healthy person and cluster of unusual severe or unexplained illnesses or deaths.

Most recent additions to the North Dakota reportable conditions list, effective March 1, 2003, include:

- *Clostridium perfringens* intoxication**
- Creutzfeldt-Jakob disease
- Glanders (*Burkholderia mellei*)**
- Melioidosis (*Burkholderia pseudomallei*)**
- Nipah viral infections***
- Psittacosis**

- Smallpox*
- *Staphylococcus enterotoxin B* intoxication**
- Tickborne encephalitis viruses**
- Tickborne hemorrhagic fevers
- Viral hemorrhagic fevers*
- Yellow fever

* Category A Biological Disease/Agent

** Category B Biological Disease/Agent

*** Category C Biological Disease/Agent

The diseases designated with an asterisk are categorized by the CDC as biological agents that could potentially be used as weapons of mass destruction. The list of high-priority agents categorized by the CDC is available at www.bt.cdc.gov/agent/agentlist.asp.

Reporting to the NDDoH can be accomplished through a variety of methods, including completion of the reportable conditions report form, telephone, electronically or fax. To view the entire list of reportable conditions for North Dakota, link to www.health.state.nd.us/disease and click on the button labeled "reportable conditions."

Contributing Authors:

Kirby Kruger, STD Program Manager
Karin Mongeon, HIV/AIDS/TB Program Manager
Denise Steinbach, HIV/AIDS Surveillance Coordinator
Paula Mosbrucker, HIV Prevention/TB Surveillance Coordinator
Bonna Cunningham, Division of Microbiology
Erin Fox, Surveillance Epidemiologist
Julie Goplin, Surveillance Epidemiologist

References:

1. American Thoracic Society/Centers for Disease Control and Prevention/Infectious Disease Society of America. Treatment of Tuberculosis. American Journal of Respiratory and Critical Care Medicine. 2003; Vol. 137:604-64
2. CDC. Norovirus Activity – United States, 2002. Morbidity and Mortality Weekly Report. 2003; Vol. 52 (3):41-
3. CDC. Preventing Pneumococcal Disease Among Infants and Young Children: Recommendations of the Advisory Committee on Immunization Practices. Morbidity and Mortality Weekly Report. 2000; Vol. 49 (RR09):1-38.
4. Lopman, B., Goutman, A., Reacher, M., and Brown, D. Two Epidemiologic Patterns of *Norovirus* outbreaks: Surveillance in England and Wales, 1992-2000. Emerging Infectious Disease [serial online] 2003 Jan [cited 2003 Feb 13];9. Available from URL: <http://www.cdc.gov/ncidod/EID/vol9no1/02-0175.htm>.
5. Minnesota Department of Health/Infectious Disease Epidemiology, Prevention and Control Division/Acute Disease Investigation and Control Section/Foodborne, Vectorborne, and Zoonotic Diseases Unit. Minnesota Department of Health 2001 Gastroenteritis Outbreak Summary. 2001; 2.

Summary of Selected Reportable Conditions

North Dakota, 1998-2002

Reportable Condition	Jan-Dec 1998	Jan-Dec 1999	Jan-Dec 2000	Jan-Dec 2001	Jan-Dec 2002*	Five Year Median
Campylobacteriosis	57	63	106	85	84	84
Chlamydia	1036	934	909	1062	1264	1036
Cryptosporidiosis	24	20	18	15	40	20
E.coli, shiga toxin positive (non-O157)	NR	NR	2	0	4	2
E. coli O157:H7	12	19	23	26	20	20
Giardiasis	82	104	65	78	47	78
Gonorrhea	80	81	73	56	72	73
Haemophilus influenzae (invasive)	1	2	8	8	7	7
Hepatitis A	4	3	3	3	0	3
Hepatitis B	4	2	2	2	7	2
Hepatitis C	0	1	1	0	1	1
HIV/AIDS	14	15	16	17	22	16
Legionellosis	0	2	1	1	1	1
Listeriosis	NR	NR	2	0	1	1
Lyme Disease	0	1	2	0	1	1
Malaria	3	0	2	0	1	1
Meningitis, bacterial (non meningococcal)	7 [▲]	6 [▲]	4 [▲]	2 [▲]	1 [▲]	4 [▲]
Meningococcal disease	5	4	2	6	4	4
MRSA (invasive)	NR	NR	15	46	521 [§]	46
Pertussis	17	22	9	11	9	11
Q fever	2	0	0	1	0	0
Rabies (animal)	155	147	118	42	59	118
Salmonellosis	68	58	73	71	61	68
Shigellosis	11	3	27	27	20	20
•Streptococcal disease, Group A (invasive)	8	8	9	22	5	8
•Streptococcal disease, Group B (infant < 3 months of age)	NR	NR	3	0	0	0
•Streptococcal disease, Group B (invasive [†])	NR	NR	14	20	15	15
•Streptococcal pneumoniae, (invasive, children < 5 years of age)	NR	NR	5	12	0	5
•Streptococcal pneumoniae (invasive [‡])	NR	NR	0	41	2	2
•Streptococcus pneumoniae, drug resistant	2	5	10	6	2	5
Tuberculosis	10	7	5	6	6	6
Tularemia	NR	NR	2	1	0	1

*Provisional data

[▲] Meningitis caused by *Staphylococcus aureus* and *Streptococcus pneumoniae*.

• Includes invasive infections caused by streptococcal disease not including those classified as meningitis.

[†] Includes invasive infections of streptococcal, Group B, disease in persons \geq 3 months of age.

[‡] Includes invasive infections caused by *Streptococcus pneumoniae* in persons \geq 5 years of age.

[§] Includes MRSA isolated from all sites after August 1, 2002.